

Exploring the Extreme			
2000 Mathematics			
Academic Standards			
Indiana Mathematics			
Grade 1			
Activity/Lesson	State	Standards	
Finding the Center of Gravity Using Rulers	IN	MA.1.1.5.1	Measure the length of objects by repeating a non-standard unit or a standard unit.
Exploring the Extreme			
2000 Mathematics			
Academic Standards			
Indiana Mathematics			
Grade 4			
Activity/Lesson	State	Standards	
Changing the Center of Gravity Using Moment Arms	IN	MA.4.4.7.4	Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, tools, and models to solve problems, justify arguments, and make conjectures.
Exploring the Extreme			
2000 Mathematics			
Academic Standards			
Indiana Mathematics			
Grade 5			
Activity/Lesson	State	Standards	
Center of Gravity, Pitch, Yaw	IN	MA.5.5.1.4	Interpret percents as a part of a hundred. Find decimal and percent equivalents for common fractions and explain why they represent the same value.
Center of Gravity, Pitch, Yaw	IN	MA.5.5.7.6	Know and apply appropriate methods for estimating results of rational-number computations.
Exploring the Extreme			
2000 Mathematics			
Academic Standards			
Indiana Mathematics			
Grade 6			
Activity/Lesson	State	Standards	
Vectoring	IN	MA.6.6.5.1	Select and apply appropriate standard units and tools to measure length, area, volume, weight, time, temperature, and the size of angles.
Center of Gravity, Pitch, Yaw	IN	MA.6.6.7.7	Select and apply appropriate methods for estimating results of rational-number computations.

Fuel Efficiency	IN	MA.6.6.3.2	Write and use formulas with up to three variables to solve problems.
Fuel Efficiency	IN	MA.6.6.6.1	Organize and display single-variable data in appropriate graphs and stem-and-leaf plots, and explain which types of graphs are appropriate for various data sets.
Fuel Efficiency	IN	MA.6.6.7.7	Select and apply appropriate methods for estimating results of rational-number computations.
Fuel Efficiency	IN	MA.6.6.7.8	Use graphing to estimate solutions and check the estimates with analytic approaches.
Exploring the Extreme			
2000 Mathematics			
Academic Standards			
Indiana Mathematics			
Grade 7			
Activity/Lesson	State	Standards	
Vectoring	IN	MA.7.7.3.2	Write and solve two-step linear equations and inequalities in one variable and check the answers.
Center of Gravity, Pitch, Yaw	IN	MA.7.7.7.8	Select and apply appropriate methods for estimating results of rational-number computations.
Fuel Efficiency	IN	MA.7.7.2.4	Use estimation to decide whether answers are reasonable in problems involving fractions and decimals.
Fuel Efficiency	IN	MA.7.7.3.1	Use variables and appropriate operations to write an expression, a formula, an equation, or an inequality that represents a verbal description.
Fuel Efficiency	IN	MA.7.7.3.5	Solve an equation or formula with two variables for a particular variable.
Fuel Efficiency	IN	MA.7.7.6.1	Analyze, interpret, and display data in appropriate bar, line, and circle graphs and stem-and-leaf plots, and justify the choice of display.
Fuel Efficiency	IN	MA.7.7.7.9	Use graphing to estimate solutions and check the estimates with analytic approaches.
Exploring the Extreme			
2000 Mathematics			
Academic Standards			
Indiana Mathematics			
Grade 8			
Activity/Lesson	State	Standards	
Center of Gravity, Pitch, Yaw	IN	MA.8.8.7.8	Select and apply appropriate methods for estimating results of rational-number computations.

Fuel Efficiency	IN	MA.8.8.6.4	Analyze, interpret, and display single- and two-variable data in appropriate bar, line, and circle graphs; stem-and-leaf plots; and box-and-whisker plots and explain which types of display are appropriate for various data sets.
Fuel Efficiency	IN	MA.8.8.7.8	Select and apply appropriate methods for estimating results of rational-number computations.
Fuel Efficiency	IN	MA.8.8.7.9	Use graphing to estimate solutions and check the estimates with analytic approaches.